The

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Paul J. Coleman, et al.

Serial No. 10/567,676 Filed: February 9, 2006

For: MITOTIC KINESIN INHIBITORS

JUL 2 4 2006 38

Art Unit: To be determined

Examiner: To be determined

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

Sir:

- 1. In compliance with 37 C.F.R. 1.97, submitted on the attached form herewith is a list of patents, publications or other information which are requested to be made of record in this application. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention. In accordance with 37 C.F.R. 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. 1.56(b).
- 2. In accordance with 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.
- Applicants respectfully request that the Examiner initial the attached form after reviewing the pertinence of each reference.
- 4. Pursuant to 37 C.F.R. 1.98 (a)(2)(ii), copies of each cited U.S. patent and each U.S. patent application publication are not enclosed herewith.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date appearing below.

MERCK & CO., INC.

Date \_\_\_\_



### INFORMATION DISCLOSURE STATEMENT

.F.R. 1.98(d), copies of references listed on the attached form that were submitted to or cited

by the Office in a related application upon which the instant application relies for an earlier filing date under 35 U.S.C. 120 are not enclosed. Related application(s) in which references were submitted to or cited by the Office are as follows:

	RELATED AF	FLICATION
U. S. SERIAL NUMBER	FILING DATE	MERCK CASE
		<del>                                     </del>
If this is inconvenient, additional copies will be submitted upo	on request.	
6. In accordance with 37 C.F.R. 1.97, (check one)		
the attached information is filed within three months of the	e filing date of the captioned case.	
the attached information is filed more than three months of Office Action on the merits.	after the filing date but prior to the	mailing of a first
the attached information is filed before the mailing of a fir examination under §1.114.	st Office action after the filing of a	request for continued
the attached information is being filed more than three modifice Action on the merits, but before the mailing date of otherwise closes prosecution in the application. The enc Account No. 13-2755 for the fee required under 37 C.F.R.	f a Final Action, Notice of Allowand losed authorization is therefore give	e, or an action that
each item of information contained in this Information Dis from a foreign patent office in a counterpart foreign applic Statement.		
each item of information contained in the information disc from a foreign patent office in a counterpart application a designated in §1.56(c) more than thirty days prior to the	nd this communication was not red	ceived by any individual
no item of information contained in this Information Discloration patent office in a counterpart foreign application, a after making reasonable inquiry, was known to any individual months prior to the filing of this Statement.	and, to the knowledge of the perso	n signing the certification
	Respectfully submitted,	
	135	-/
	By: David A. Muthard	nlicant(e)
	Attorney For Ap Reg. No. 35,297	plicant(s)
	MERCK & CO., INC.	<del></del>
	Patent Dept., RY60-30	
	P.O. Box 2000	
•	Rahway, N.J. 07065-090	)7
	(732)594- <u>3903</u>	_

Date: <u>July 18, 2006</u>





### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Pa

Paul J. Coleman, et al.

Serial No.:

10/567,676

Case No.: 21481YP

Art Unit:

To be determined

Filed:

February 9, 2006

Examiner:

For:

MITOTIC KINESIN INHIBITORS

To be determined

Mail Stop: Amendment Commissioner of Patents

PO Box 1450

Alexandria, Virginia 22313-1450

# EXPLANATION OF RELEVANCE OF NON-ENGLISH DOCUMENTS UNDER 37 C.F.R. 1.98(a)(3)(i)

Sir:

Applicants respectfully note that two (2) of the documents listed on the USPTO 1449 form submitted herewith are not in the English language and a copy of an English translation of those documents are not within the possession, custody or control of Applicants, and, to the Applicants knowledge, are not readily available. Below is a concise explanation of the relevance of those non-English documents:

The French scientific publication by O. Yebdri and F. Texier (*Bull. Soc. Chim. Fr.*) discloses preparation of a series of 2,3-dihydro-4-phenyl pyrrole compounds having nitrile and ester disubstitution on the 3-position. The Yebdri publication also describes saponification of the ester to provide the corresponding 2,5-dihydropyrrole compound (see for instance compound 19). There is no disclosure in the Yebdri publication of a pharmaceutical use for the compounds disclosed therein.

The French scientific publication by A. Ranjon (*Bull. Soc. Chim. Fr.*) discloses photooxidation reactions of polyphenyl imidazole and polyphenyl pyrrole compounds in which 2,5-endoperoxide derivatives are transient intermediates. The Ranjon publication also describes dihydroxypyrrole intermediates in such reactions (see for instance compound 29). There is no disclosure in the Ranjon publication of a pharmaceutical use for the compounds disclosed therein.

The instant invention discloses certain substituted 2,4-diaryl-2,5-dihydropyrroles that are inhibitors of the mitotic kinesin KSP and are useful in the treatment of cancer.

#### **CERTIFICATE OF MAILING**

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VIRGINIA 22313-1450, ON THE DATE APPEARING BELOW.

MERCK & CO., INC.

DATE.

Date: July 18, 2006

Respectfully submitted,

David A. Muthard Reg. No. 35,297

Attorney for Applicant(s)

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Rahway, New Jersey 07065-0907

(732) 594-3903

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		NFORMATION	DIS	CLOSURE	Application Number	10/567,676	
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			U.S. PA	ATENT DOCUMENTS	
Examiner Initials*	Cite No.	U.S. Patent Document Number	Kind Code (if known)		Date of Publication of Cited Document MM-DD-YYYY
		6,057,342		Fevig et al.	05/02/2000
		6,440,686		Sakowicz	08/27/2002
		3,644,414		Helsey, et al.	02/22/1972
			+		
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			FOREI	GN PATENT	T DOCUMENTS	
Examiner	Cite		Foreign Patent Document Kind		Name of Patentee or Applicant	Date of Publication of Cited Document
Initials*	No.	Office	Number	Code (if known)	of Cited Document	MM-DD-YYYY
		PCT	WO 93/20099		Yamanouchi Pharm. Co., Ltd.	10/14/1993
		PCT	WO 98/06694		The DuPont Merck Pharm. Co.	02/19/1998
		PCT	WO 03/049527		Merck & Co., Inc.	06/19/2003
		PCT	WO 03/105855		Merck & Co., Inc.	12/24/2003
		PCT	WO 2004/037171		Merck & Co., Inc.	05/06/2004
		PCT	WO 03/106417		Merck & Co., Inc.	12/24/2003
		PCT	WO 2005/019206		Merck & Co., Inc.	03/03/2005
		PCT	WO 2005/019205		Merck & Co., Inc.	03/03/2005
		EPO	EP 0 418 845		Fujisawa Pharmaceutical Co., Ltd.	08/09/1995

Examiner	 ·		 
Signature	 	Date Considered	

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MFE? 609. Draw line through citation if not in conformance and not considered. Include copy of this form with new communication applicant.

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STATEMENT BY APPLICANT				First Named Inventor	Paul J. Coleman			
	,			Group Art Unit	To be determined			
(use as many sheets as necessary)				Examiner Name	To be determined			
Sheet	2	of	3	Attorney Docket Number	21481YP			

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
		C. Sonesson, et al., J. Org. Chem. 1996, Vol. 61, pg. 4756-4763
		N. Iwasawa, et al., J. Org. Chem. 1998, Vol. 63, pg. 3164-3165
		N. Iwasawa, et al., J. Org. Chem. 1997, Vol. 62, pg. 1918-1919
		R. Mison, et al., J. Chem. Research(S), 1989, 126-127
		O. Yebdri, et al., Bulletin De La Societe Chimique de France, 1983, pg. 195-201
		A. Ranjon, Bulletin De La Societe Chimique de France, 1971, pg. 2068-2072
		M. Bujard, et al., Tetrahedron Letters, Vol. 40, 1999, pg. 8785-8788
	_ ,	M. Carpes, et al., Synlett, No. 7, 2000, pg. 1037-1039
		A. Boukhari, et al., J. Cryst. Spect. Res., Vol. 19, Iss. 3, 1989, pg. 603-621
		C. Cox, et al., Bioorganic & Medicinal Chem Ltrs. Vol. 15, pgs. 2041-2045 (2005)
		W. Tao, Cell Cycle, Vol. 4(11), pgs. 1495-1499 (2005)
		K. D. Chu, et al., Proc. Am. Soc. Clin. Oncol., abstract 525, pg. 131 (2003)
		R. Sakowicz, et al., Cancer Research, Vol. 64, pgs. 3276-3280 (2004)
		W. Tao, et al., Cancer Cell, Vol. 8, pgs. 49-59 (2005)
		M. Fraley, et al., Bioorganic & Medicinal Chem Ltrs., Vol. 16, pgs. 1775-1779 (2006)

Examiner Signature		Date Considered	

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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				Group Art Unit	To be determined			
	(use as many sheets	as n	ecessary)	Examiner Name	To be determined			
Sheet	3	of	3	Attorney Docket Number	21481YP			

		NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No.	Include name of the author, title, date, page(s), volume-issue number(s) and place of publication.
		R. Garbaccio, et al., Bioorganic & Medicinal Chem Ltrs., Vol. 16, pgs. 1780-1783 (2006)
	·	C. Cox, et al., Bioorganic & Medicinal Chem Ltrs., Vol. 16, pgs. 3175-3179 (2006)

<sup>\*</sup>Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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